

Gulf of Mexico Harmful Algal Bloom Bulletin

27 January 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: January 25, 2005

Conditions: A harmful algal bloom has been identified offshore of Clearwater and Sarasota (Pinellas, Manatee and Sarasota Counties). Medium westerly winds expected today. Impacts at the beach are expected to be patchy and moderate today followed by very low impacts through Saturday. Patchy, low impacts possible Sunday and Monday. Discolored water is likely along Florida coast.

A harmful algal bloom has been identified southwest of Cape Sable and north of the lower Keys. Discolored water is possible in the area. No impacts expected at Key West through Monday.

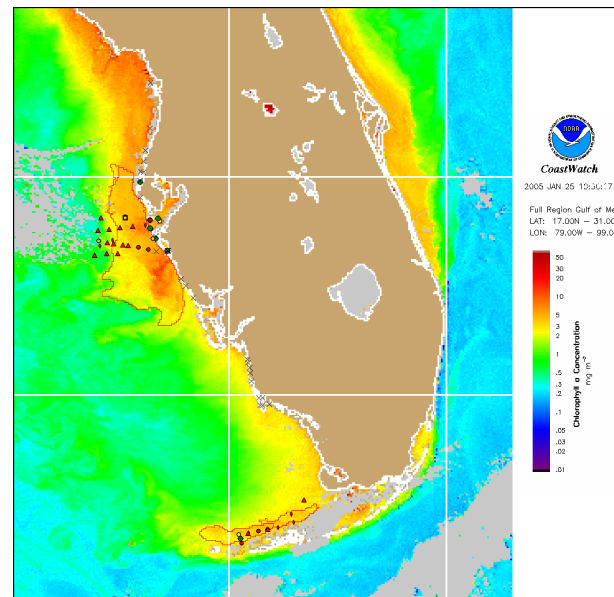
Analysis: The previously identified harmful algal bloom in the Tampa Bay region has expanded southward, trailing offshore of North Captiva. Resuspension event continues to limit analysis of bloom extent. Respiratory distress has been reported at Longboat and Siesta Keys today due to onshore winds. Previous upwelling favorable winds appear to have intensified chlorophyll concentrations (3-6 $\mu\text{g/L}$ band extends approx. 21 miles offshore). High chlorophyll patches were located outside the Tampa Bay entrance (9 $\mu\text{g/L}$, 82°46'W, 27°29'N) and near Venice (up to 33 $\mu\text{g/L}$, 82°32'W, 26°56'N). Approximate extent of the large, southernmost high patch is 82°39'W, 27°11'N (north edge), 82°30'W, 26°26'N (south edge) and 82°39'W, 26°47'N (west edge). Recommend sampling at these locations. Onshore winds may continue patchy impacts at beaches today. Strong, upwelling favorable, northeasterlies tonight and Friday may cause further intensification but minimize beach impacts. Alongshore winds Saturday night and Monday may result in patchy, low beach impacts. Variable winds will maintain bloom location or southward current may cause slightly southerly movement.

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

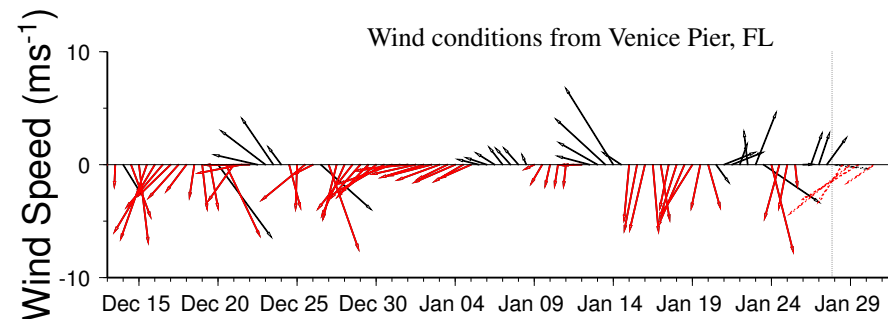
1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
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4. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

Key West: Chlorophyll concentrations have increased in the offshore parallel band (up to 7 $\mu\text{g/L}$) and is likely related to the resuspension event. Offshore and westerly transport is expected through Monday.

~Fenstermacher & Fisher

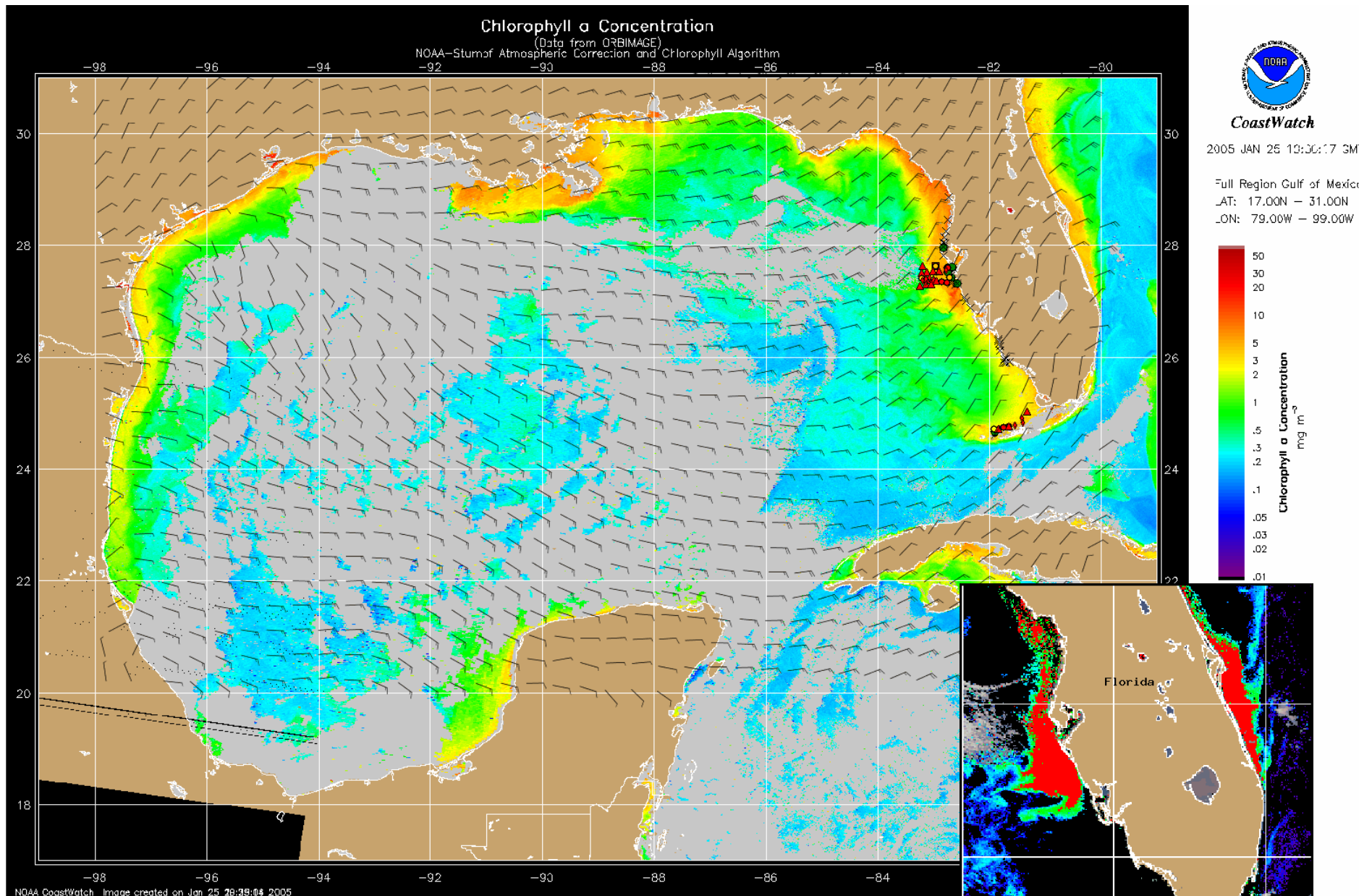


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 19, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

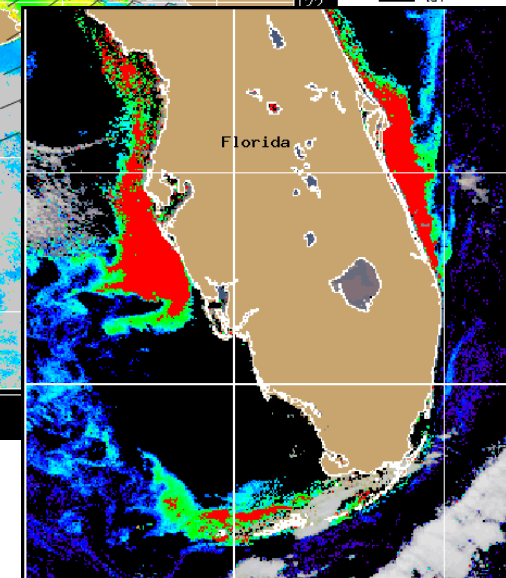


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Tampa Bay region to Englewood: West winds at 10 knots (5 m/s) clocking around to the northeast tonight and Friday (10-15 knots, 5-8 m/s). Strong (10-15 knots, 5-8 m/s) east winds on Friday night through Saturday afternoon, followed by strong southeast winds on Saturday night and through Monday. **Keys:** West winds at 5-10 knots (3-5 m/s) becoming northeast tonight. Northeast to easterlies expected on Friday followed by easterlies through Monday (10-15 knots, 5-8 m/s).



Chlorophyll concentration from satellite and forecast winds for January 28, 2005 12Z with cell concentration sampling data from January 19, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Blooms shown in red (see p. 1 analysis and image for interpretation)

